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**D205-634-145**  
**Job Sheet 186083**



Part No: D205-634-145

Job Qty: 1 ea

Part Name: Replacement Skidtube with Thru-Bolt Standard Wearplates Fits LH or RH



Part Weight: 0 lbs

Status: New

Priority: Medium

Job Created: 11/9/18

Job Tracking No:

Due Date: 11/30/18

Created By: Marie Lajeunesse

Type: SOLD

Description:

Note: DWG D2580-049 REV H, IIN-D205-634 REV I IPP REV:B 14.04.21 NEW ISSUE DD VERF:JLM

Ship Via:

### Bill of Materials

### Job Routing

| Op No | Operation          | Qty   | Start Date | Due Date | Standard  |         | Workcenter/Supplier   |             | Sign-off         |
|-------|--------------------|-------|------------|----------|-----------|---------|-----------------------|-------------|------------------|
|       |                    |       |            |          | Setup Hrs | Run Hrs | Workcenter / Supplier | Lead Time   |                  |
| 90    | Start up Operation | 1 Ea  | 11/30/18   | 11/30/18 | 0.00      | 0.00    | Start Up Skidtubes-1  |             | DD               |
| 110   | Skidtubes          | 1 pcs | 11/30/18   | 11/30/18 | 0.00      | 2.01    | Skidtubes-2           |             | TF DD            |
| 120   | CNC Bend Skidtubes | 1 pcs | 11/30/18   | 11/30/18 | 0.49      | 0.60    | CNC Bend Skidtube     |             | MFx TF sup       |
| 130   | Skidtubes          | 1 pcs | 11/30/18   | 11/30/18 | 0.00      | 2.01    | Skidtubes-2           |             | BE               |
| 140   | QC                 | 1 pcs | 11/30/18   | 11/30/18 | 0.00      | 0.00    | QC5                   |             | BE               |
| 150   | Skidtubes          | 1 pcs | 11/30/18   | 11/30/18 | 0.00      | 2.01    | Skidtubes-2           |             | BE TF DD         |
| 160   | QC                 | 1 pcs | 11/30/18   | 11/30/18 | 0.00      | 0.00    | QC10                  |             | 38 DAS           |
| 170   | QC                 | 1 pcs | 11/30/18   | 11/30/18 | 0.00      | 0.00    | QC5                   |             | 9-89 38          |
| 180   | HandFinish         | 1 pcs | 11/30/18   | 11/30/18 | 0.00      | 1.07    | HandFinish2           |             | DR 18/11/26      |
| 190   | Powdercoat         | 1 pcs | 11/30/18   | 11/30/18 | 0.00      | 0.18    | Powdercoat1           |             | DR 5-11-26       |
| 200   | QC                 | 1 pcs | 11/30/18   | 11/30/18 | 0.00      | 0.00    | QC3                   |             | ML 12-11-26      |
| 210   | HandFinish         | 1 pcs | 11/30/18   | 11/30/18 | 0.00      | 1.07    | HandFinish4           |             | ML 12-11-26      |
| 220   | QC                 | 1 pcs | 11/30/18   | 11/30/18 | 0.00      | 0.00    | QC5                   |             | NOV 28 2018 68   |
| 225   | DC                 | 1 pcs | 11/30/18   | 11/30/18 | 0.00      | 0.00    | DC                    |             | DAS 9-89         |
| 230   | Packaging          | 1 pcs | 11/30/18   | 11/30/18 | 0.00      | 0.00    | Packaging3-1          | NOV 28 2018 | 69 NOV 28 2018   |
| 240   | QC21-FG            | 1 Ea  | 11/30/18   | 11/30/18 | 0.00      | 0.00    | QC21                  |             | 9-89 NOV 28 2018 |

Part Op 110 - 1- PICK D2580-1 2- SPOT DRILL 2 AFT RUN ON WEARPLATE HOLES USING DT10021, DRILL 3.630" HOLES  
Descriptions: USING DT8462 (83.94" FROM AFT OF D2580-1 REF. ONLY)

120 - 1-Bend as per program D2580 SKID on CNC Bender and Folio FT 16 2-Cut tubes as per Dwg. D2580 3- Scribe batch# in aft end of tube

130 - 1-Deburr ends after cutting and remove bending marks. Prepare tube for welding D2576-3 step remove alodine as required. 2-Locating from most fwd saddle hole, drill most fwd wearplate hole using DT9793 (10.832 REF) as per dwg D2580 sheet 7. 3-Open run-on wearplate holes to finished size 0.508" at locations (5.338/ 5.985/ 10.832/ 3.63 REF) as per dwg D2580 sheet 7. 4-Drill pilot holes for aft cap using DT8215, Open to finished size.

150 - 1-Weld step D2576 as per Dwg. D2580 and QSI 004 A/R Aluminum Rod 138673 Grind welds flush. 2-Touch up alodine on run on wearplate holes prior to swaging 3- Insert D4202-1 spacer, swage as per QSI002 and trim/ grind flush per QSI002 and as per dwg 4-DRILL TOWING HOLE USING DT8091 5-DEBURR

180 - Realodine tube as per QSI 005

190 - START TIME: 1:00 OVEN TEMPERATURE: 320° FINISH TIME: 1:30

210 - 1-Install inserts & wearplates as per Dwg. D2580. Use a drop of Sikaflex on insert holes before installing wearplates A/R Sikaflex-291 Sikaflex expire date: 2-Coat D2594-3 O' rings with

220 - Inspect Aft Cap, Fwd Step and Wing Walk of work to Current Step Inspect for Foreign objects per QSI 024

225 - Photocopy D205-634 bluefile & type labels per PPP D205-634-145 CHG001

230 - Identify and pack for shipping as per PPPD205-634-145 Location : FG073



DQA: \_\_\_\_\_ Date: \_\_\_\_\_

## WORK ORDER NON-CONFORMANCE / UPDATE



QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Work Order update only ☐

|                                                              |  |                                         |  |                                                                                                                                                                                                                                                                                                                                                                 |  |
|--------------------------------------------------------------|--|-----------------------------------------|--|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| Work Order: _____<br><br>Part No. _____<br><br>NCR No. _____ |  | DISPOSITION<br><br>Suspected Unapproved |  | <div style="text-align: right;"> <br/> <b>Container No: S130149</b><br/> <b>Part: D205-634-145</b><br/> <b>Job No: 186033</b><br/> <b>Serial No/Batch: S130149</b><br/>         Revision: _____<br/>         Inspector: _____<br/>         Exp Date: _____<br/>         Instructions: TC STC SH96-88 Issue Ref: FAP-87C SR00563NY 08/08/11, EASA S       </div> |  |
| Date: _____                                                  |  | Step #: _____                           |  |                                                                                                                                                                                                                                                                                                                                                                 |  |
| <b>Description Work Order Deviation</b>                      |  |                                         |  |                                                                                                                                                                                                                                                                                                                                                                 |  |
|                                                              |  |                                         |  |                                                                                                                                                                                                                                                                                                                                                                 |  |

| Root Cause         |                          |                       | FAULT CATEGORY           |                                   |                          |
|--------------------|--------------------------|-----------------------|--------------------------|-----------------------------------|--------------------------|
| Environment        | <input type="checkbox"/> | No Re-verification    | <input type="checkbox"/> | Pressure/Forced                   | <input type="checkbox"/> |
| Design             | <input type="checkbox"/> | Operator              | <input type="checkbox"/> | Temperature/Cure                  | <input type="checkbox"/> |
| Doc/Data           | <input type="checkbox"/> | Offset/Setup          | <input type="checkbox"/> | Set-up                            | <input type="checkbox"/> |
| Equip/Tooling      | <input type="checkbox"/> | Supplier              | <input type="checkbox"/> | BOM/Route                         | <input type="checkbox"/> |
| Handling/Pre       | <input type="checkbox"/> | Training              | <input type="checkbox"/> | Broken/Damage/Defect              | <input type="checkbox"/> |
| Material           | <input type="checkbox"/> | Use for Testing       | <input type="checkbox"/> | Inspection Incomplete/Unqualified | <input type="checkbox"/> |
| Internal Transport | <input type="checkbox"/> | Poor Information      | <input type="checkbox"/> | Contamination                     | <input type="checkbox"/> |
| Tribal Knowledge   | <input type="checkbox"/> | Rushing               | <input type="checkbox"/> | Countersink                       | <input type="checkbox"/> |
| LOA                | <input type="checkbox"/> | Product Improvement   | <input type="checkbox"/> | Cut Too Short                     | <input type="checkbox"/> |
| Substation         | <input type="checkbox"/> | Process Improvement   | <input type="checkbox"/> | Instructions Incomplete/Unclear   | <input type="checkbox"/> |
| Past Expiry Date   | <input type="checkbox"/> | Manufacturing Process | <input type="checkbox"/> | Drill Holes                       | <input type="checkbox"/> |
| Misidentified      | <input type="checkbox"/> | Past Due              | <input type="checkbox"/> |                                   | <input type="checkbox"/> |
|                    |                          |                       | OTHER : _____            |                                   |                          |



# Job BOM

| Part / Item   | Component Name          | Quantity      | Operation             | Container |
|---------------|-------------------------|---------------|-----------------------|-----------|
| D2580-1       | 205 Bent Tube           | 1 Ea (1 ea)   | 90-Start up Operation | 5128023   |
| AN3-5A        | Bolt                    | 2 Ea (2 ea)   | 210-HandFinish        | 5095420   |
| AN4-45A       | Bolt                    | 8 Ea (8 ea)   | 210-HandFinish        | 5103295-1 |
| D2570         | Bushing                 | 16 Ea (16 ea) | 210-HandFinish        | 5108646   |
| D2576-3       | Step (Machining Detail) | 1 Ea (1 ea)   | 210-HandFinish        | 5089827   |
| D2594-1       | Plug                    | 8 Ea (8 ea)   | 210-HandFinish        | 5128401   |
| D2594-3       | O-Ring                  | 8 Ea (8 ea)   | 210-HandFinish        | 5106795   |
| D2855         | Cap                     | 1 Ea (1 ea)   | 210-HandFinish        | 5066018   |
| D4202-1       | Spacer                  | 24 Ea (24 ea) | 210-HandFinish        | 5121344   |
| D5061-1       | Fwd Wearplate           | 1 Ea (1 ea)   | 210-HandFinish        | 5079400   |
| D5061-3       | Aft Wearplate           | 1 Ea (1 ea)   | 210-HandFinish        | 5079418   |
| MS21042-4     | Nut                     | 8 Ea (8 ea)   | 210-HandFinish        | 5638763   |
| NAS1149D0332J | Washer                  | 2 Ea (2 ea)   | 210-HandFinish        | 5106407   |

## Job Allocations

008696

| Operation             | Component Part | Required | Inventory | Allocated |
|-----------------------|----------------|----------|-----------|-----------|
| 90-Start up Operation | D2580-1        | 1        | 1         | 0         |
| 210-HandFinish        | AN3-5A         | 2        | 314       | 0         |
|                       | AN4-45A        | 8        | 131       | 0         |
|                       | D2570          | 16       | 117       | 0         |
|                       | D2576-3        | 1        | 38        | 0         |
|                       | D2594-1        | 8        | 160       | 0         |
|                       | D2594-3        | 8        | 472       | 0         |
|                       | D2855          | 1        | 92        | 0         |
|                       | D4202-1        | 24       | 366       | 0         |
|                       | D5061-1        | 1        | 4         | 0         |
|                       | D5061-3        | 1        | 3         | 0         |
|                       | MS21042-4      | 8        | 96        | 0         |
|                       | NAS1149D0332J  | 2        | 1,945     | 0         |

## Part Specifications

Specifications could not be found.



DQA: \_\_\_\_\_ Date: \_\_\_\_\_



## WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Work Order update only ☐

|                                                              |                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                            |                                                |                                               |
|--------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------|------------------------------------------------|-----------------------------------------------|
| Work Order: _____<br><br>Part No. _____<br><br>NCR No. _____ | <b>DISPOSITION</b><br><br>Rework <input type="checkbox"/><br>Scrap <input type="checkbox"/><br>Use-as-is <input type="checkbox"/><br>Suspected Unapproved <input type="checkbox"/> | <b>AGAINST DEPARTMENT/PROCESS</b><br><br><div style="display: flex; justify-content: space-between;"> <div>           Skid-tube <input type="checkbox"/><br/>           Machining <input type="checkbox"/><br/>           Thermoforming <input type="checkbox"/><br/>           Large Fab <input type="checkbox"/> </div> <div>           Cross tube <input type="checkbox"/><br/>           Small Fab <input type="checkbox"/><br/>           Finishing <input type="checkbox"/><br/>           Composite <input type="checkbox"/> </div> <div>           Water Jet <input type="checkbox"/><br/>           Prod. Eng. Coord. <input type="checkbox"/><br/>           Rec/Store/Packaging <input type="checkbox"/><br/>           Supplier <input type="checkbox"/> </div> <div>           Engineering <input type="checkbox"/><br/>           Quality <input type="checkbox"/><br/>           Other <input type="checkbox"/> </div> </div> |                                                            |                                                |                                               |
| Date :                                                       | Step #:                                                                                                                                                                            | QTY Effective :                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                            | MRB (QS1042) Approval                          |                                               |
| Description Work Order Deviation                             |                                                                                                                                                                                    | Disposition                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                            | Completed By                                   |                                               |
|                                                              |                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                            | Lead hand / Supervisor Approval Verification   |                                               |
|                                                              |                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                            | QC / QA Coordinator Approval                   |                                               |
|                                                              |                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                            |                                                |                                               |
| Root Cause                                                   |                                                                                                                                                                                    | FAULT CATEGORY                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                            |                                                |                                               |
| Environment <input type="checkbox"/>                         | No Re-verification <input type="checkbox"/>                                                                                                                                        | Pressure/Forced <input type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Temperature/Cure <input type="checkbox"/>                  | Power Loss/Surge <input type="checkbox"/>      | Positioned Wrong <input type="checkbox"/>     |
| Design <input type="checkbox"/>                              | Operator <input type="checkbox"/>                                                                                                                                                  | Bending <input type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Set-up <input type="checkbox"/>                            | Folio/Program <input type="checkbox"/>         | Outside Dimensions <input type="checkbox"/>   |
| Doc/Data <input type="checkbox"/>                            | Offset/Setup <input type="checkbox"/>                                                                                                                                              | Centre Not Concentric <input type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | BOM/Route <input type="checkbox"/>                         | Grain <input type="checkbox"/>                 | Over/Under tolerance <input type="checkbox"/> |
| Equip/Tooling <input type="checkbox"/>                       | Supplier <input type="checkbox"/>                                                                                                                                                  | Cracks <input type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Broken/Damage/Defect <input type="checkbox"/>              | Weld <input type="checkbox"/>                  | Part Incorrect <input type="checkbox"/>       |
| Handling/Pre <input type="checkbox"/>                        | Training <input type="checkbox"/>                                                                                                                                                  | Crimp/Kink/Ripple/Wave <input type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Inspection Incomplete/Unqualified <input type="checkbox"/> | Wrong Stock Pulled <input type="checkbox"/>    | Part Lost/Missing <input type="checkbox"/>    |
| Material <input type="checkbox"/>                            | Use for Testing <input type="checkbox"/>                                                                                                                                           | Cuffs <input type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Contamination <input type="checkbox"/>                     | Out of Sequence <input type="checkbox"/>       | Part Moved <input type="checkbox"/>           |
| Internal Transport <input type="checkbox"/>                  | Poor Information <input type="checkbox"/>                                                                                                                                          | Crushing <input type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Countersink <input type="checkbox"/>                       | Off-set <input type="checkbox"/>               | Drawing <input type="checkbox"/>              |
| Tribal Knowledge <input type="checkbox"/>                    | Rushing <input type="checkbox"/>                                                                                                                                                   | Heat Treat <input type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Cut Too Short <input type="checkbox"/>                     | Mislabeled <input type="checkbox"/>            | Finish <input type="checkbox"/>               |
| LOA <input type="checkbox"/>                                 | Product Improvement <input type="checkbox"/>                                                                                                                                       | Wave/Twist in Tube <input type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Instructions Incomplete/Unclear <input type="checkbox"/>   | Fit/Function <input type="checkbox"/>          | Misread <input type="checkbox"/>              |
| Substation <input type="checkbox"/>                          | Process Improvement <input type="checkbox"/>                                                                                                                                       | Marks/Chatter <input type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Drill Holes <input type="checkbox"/>                       | Misaligned/off center <input type="checkbox"/> | Turning Sequence <input type="checkbox"/>     |
| Past Expiry Date <input type="checkbox"/>                    | Manufacturing Process <input type="checkbox"/>                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                            |                                                |                                               |
| Misidentified <input type="checkbox"/>                       | Past Due <input type="checkbox"/>                                                                                                                                                  | OTHER :                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                            |                                                |                                               |



| ITEM | QTY<br>-041 | QTY<br>-045 | QTY<br>-047 | QTY<br>-049 | PART NUMBER                                                               | DESCRIPTION         |
|------|-------------|-------------|-------------|-------------|---------------------------------------------------------------------------|---------------------|
| 1    | X           |             |             |             | D2580-041                                                                 | SKIDTUBE ASSEMBLY   |
| 2    |             | X           |             |             | D2580-045                                                                 | SKIDTUBE ASSEMBLY   |
| 3    |             |             | X           |             | D2580-047                                                                 | SKIDTUBE ASSEMBLY   |
| 4    |             |             |             | X           | D2580-049                                                                 | SKIDTUBE ASSEMBLY   |
| 20   | 1           | 1           | 1           | 1           | D2500-1-190                                                               | EXTRUSION           |
| 21   |             |             | 16          | 16          | D2570                                                                     | BUSHING             |
| 22   | 1           | 1           | 1           | 1           | D2578-3                                                                   | STEP                |
| 23   |             | 4           |             |             | D2579                                                                     | SPACER              |
| 24   | 16          | 16          | 8           | 8           | D2594-1                                                                   | PLUG                |
| 25   | 16          | 16          | 8           | 8           | D2594-3                                                                   | O-RING              |
| 26   | 1           | 1           | 1           | 1           | D2596                                                                     | 205 WEB             |
| 27   | 1           | 1           | 1           | 1           | D2855                                                                     | AFT CAP             |
| 28   | 1           | 1           |             |             | D3584-5                                                                   | WEARSHOE            |
| 29   | 1           | 1           |             |             | D3584-9                                                                   | WEARSHOE            |
| 30   | 1           | 1           |             |             | D3584-11                                                                  | WEARSHOE            |
| 31   | 1           | 1           |             |             | D3584-13                                                                  | WEARSHOE            |
| 32   | 20          | 20          | 24          | 24          | D4202-1                                                                   | SPACER              |
| 33   |             |             | 1           |             | D4406-041                                                                 | WEARPLATE ASSEMBLY  |
| 34   |             |             | 1           |             | D4406-043                                                                 | WEARPLATE ASSEMBLY  |
| 35   |             |             |             | 1           | D5081-1                                                                   | FWD WEARPLATE       |
| 36   |             |             |             | 1           | D5081-3                                                                   | AFT WEARPLATE       |
| 50   | 50          | 50          |             |             | ALS7-1032-130<br>or AKS7-1032-130<br>or AKS4-1032-130<br>or AELS-1032-130 | INSERT              |
| 51   | 50          | 50          |             |             | AN3C4A                                                                    | BOLT                |
| 52   | 2           | 2           | 2           | 2           | AN3-5A                                                                    | BOLT                |
| 53   |             |             | 8           | 8           | AN4-45A                                                                   | BOLT                |
| 54   | 50          | 50          |             |             | NAS1149C0332R                                                             | WASHER (AN980C10L)  |
| 55   | 2           | 2           | 2           | 2           | NAS1149D0332J                                                             | WASHER (AN980JD10L) |
| 56   |             |             | 8           | 8           | MS21042-4                                                                 | NUT (OR MS21042L4)  |

#### GENERAL NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: CHEMICAL CONVERSION PER DART QSI 005 4.1 PRIOR TO INSERTING D2580 WEB  
POWDER COAT (-041/-047/-049) GLOSS WHITE (REF 4.3.5.1) PER DART QSI 005 4.3  
POWDER COAT (-045) GREEN SANDTEX (REF 4.3.5.8) PER DART QSI 005 4.3  
BLACK ANTI-SKID PAINT AS INDICATED PER DART QSI 005 4.4.
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED.
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED.
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX.
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: D2580-041 = 33.7 lbs  
D2580-045 = 33.7 lbs  
D2580-047 = 45.1 lbs  
D2580-049 = 32.0 lbs
- 8) WELDING PER DART QSI 004.
- 9) INSERT D2596 WEB TO LOCATION SHOWN OFF AFT END OF SKIDTUBE AND BOND WEB INTO OUTER TUBE WITH NON-STRUCTURAL SIKAFLEX-241 ADHESIVE PER DART QSI 015 BEFORE BENDING. ENSURE HOLES LINE-UP.
- 10) BEND AS A SMOOTH RADIUS STARTING WITH A MAXIMUM CENTERLINE RADIUS OF 60 AND ENDING WITH A MINIMUM RADIUS OF 30. A MAXIMUM REDUCTION OF 0.200 IN DIAMETER IS ALLOWABLE IN THE BENT PORTION OF THE TUBE.
- 11) USE DART DRILL TEMPLATE DT8217 & DT8937 ONLY FOR D2580-041/-045 TO LOCATE AND DRILL Ø0.287 HOLES FOR WEARSHOE INSERTS. INSTALL ALS7-1032-130 PER SECTIONS B-B AND F-F (50 PLACES) AFTER FINISH. INSTALL AN3C4A BOLTS AND NAS1149C0332R WASHERS WITH SIKAFLEX-241-281.
- 12) INSERT D2594-1 PLUG C/W D2594-3 O-RING IN HOLES MARKED 'P' (BOTH SIDES OF TUBE) AFTER FINISH (16 PLACES FOR D2580-041/-045 AND 8 PLACES FOR D2580-047/-049)
- 13) IT IS ACCEPTABLE TO GRIND A RELIEF IN THE D2855 AFT CAP TO PREVENT INTERFERENCE WITH THE SPACER AT THIS LOCATION

SHOP COPY  
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1871-09

RELEASED

2017 JUL 05 4P  
ECMT-569

|            |                                                                                                                                                           |     |          |
|------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|-----|----------|
| H          | SHEET: PL DELETE D3686-1/-5/-13 GASKETS, WEIGHTS UPDATED ACCORDINGLY. SHEETS 2 & 4 PICTORIAL UPDATE FOR REMOVAL OF GASKETS                                | SAD | 17.06.09 |
| G          | ADDED -049, -047 WEIGHT UPDATED PER DSI 9598                                                                                                              | AJS | 14.04.09 |
| F          | INCORPORATE DEO D2580-E-1 PER PAR12-218                                                                                                                   | DC  | 13.08.20 |
| E          | ADD D2580-047 (ZN C4-7) AND D2580-7 (ZN B3-8); INCLUDED DEO D2580-D-1; REFORMATTED DRAWING TO CURRENT STANDARDS; DT8217 & DT8937 WAS TD2577-205 (ZN C4-1) | RF  | 11.06.21 |
| D          | CHANGE TO SS WEARPLATES AND GASKETS, INCLUDE DEO 9124/ 9183                                                                                               | PH  | 07.04.06 |
| C          | REDRAWN, INCLUDED DEO 9094/ 9097                                                                                                                          | CP  | 98.08.26 |
| B          | AS MANUFACTURED                                                                                                                                           | DS  | 98.12.02 |
| A          | NEW ISSUE                                                                                                                                                 | DS  | 98.09.16 |
| REV.       | DESCRIPTION                                                                                                                                               | BY  | DATE     |
| DESIGN     | DS                                                                                                                                                        |     |          |
| DRAWN      | SAD                                                                                                                                                       |     |          |
| CHECKED    | <i>[Signature]</i>                                                                                                                                        |     |          |
| MFG. APPR. | <i>[Signature]</i>                                                                                                                                        |     |          |
| APPROVED   | <i>[Signature]</i>                                                                                                                                        |     |          |
| DE APPR.   | <i>[Signature]</i>                                                                                                                                        |     |          |
| DATE       | 17.06.09                                                                                                                                                  |     |          |

**DART AEROSPACE LTD**  
HAWKESBURY, ONTARIO, CANADA

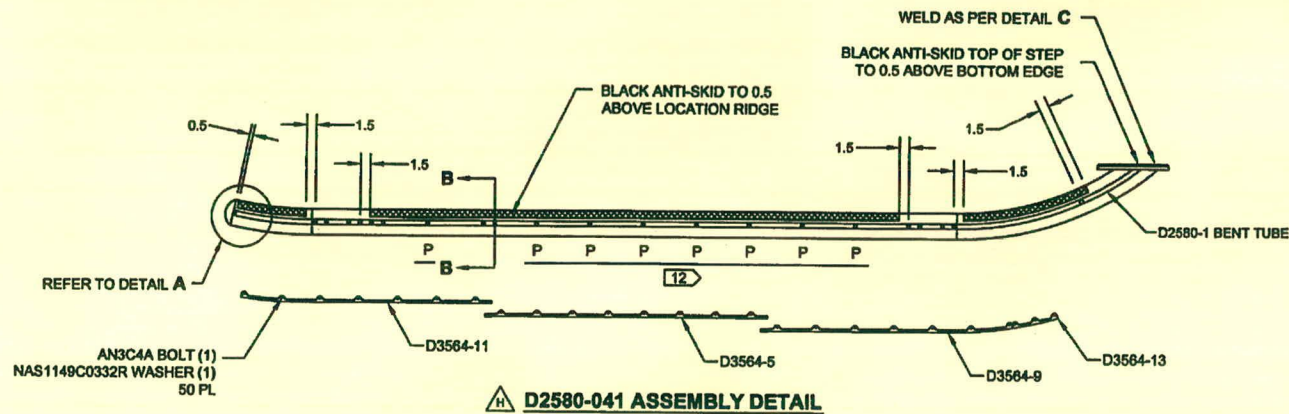
DRAWING NO. D2580  
TITLE 205 SKIDTUBE ASSEMBLY  
REV. H  
SHEET 1 OF 9  
SCALE  
NTS

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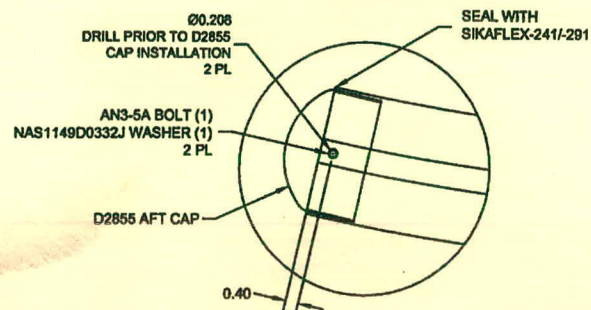




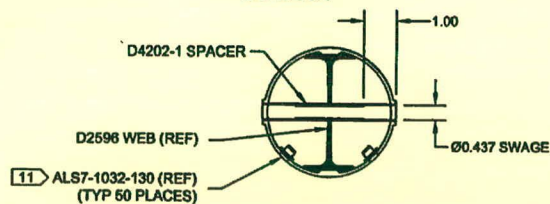




**DETAIL A**  
SCALE 5X

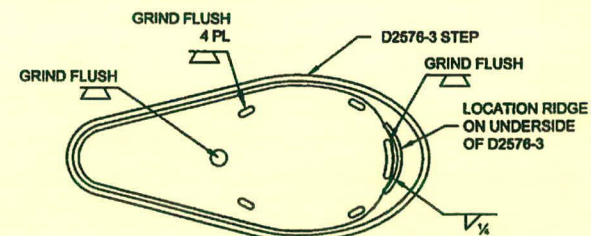


**SECTION B-B**  
SCALE 5X



AFTER DRILLING AND BENDING ASSEMBLY  
PERFORM THE FOLLOWING FOR Ø0.508 HOLES ONLY:  
1. INSERT D4202-1 SPACER (20 PLACES)  
2. SWAGE TO Ø0.437 X 1.00 DEEP PER QSI 002  
3. TRIM / GRIND FLUSH PER QSI 002

**DETAIL C**  
SCALE 5X



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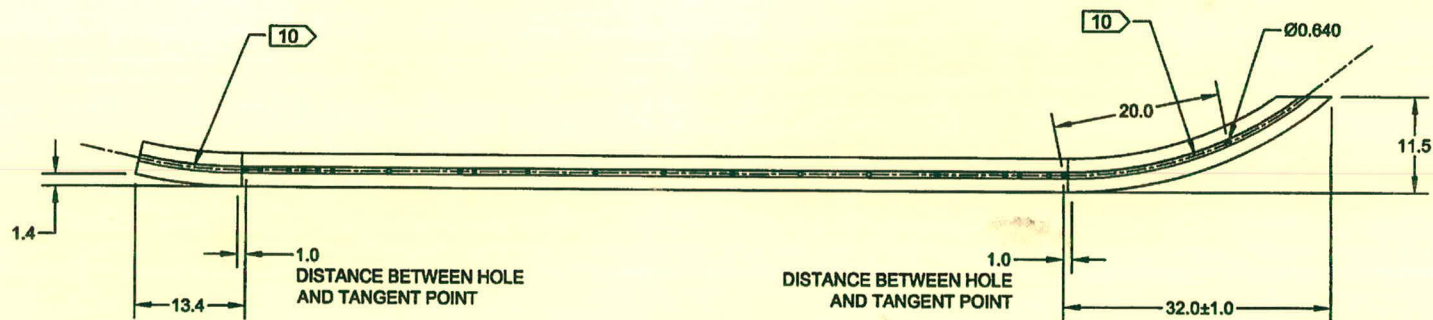
2017 JUL 05

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|------------|--------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|
| DESIGN     | DS                 | <b>DART AEROSPACE LTD</b><br>HAWKESBURY, ONTARIO, CANADA                                                                                                                                                                                                                       |              |
| DRAWN      | SAD                |                                                                                                                                                                                                                                                                                |              |
| CHECKED    | <i>[Signature]</i> | DRAWING NO.<br>D2580                                                                                                                                                                                                                                                           | REV. H       |
| MFG. APPR. | <i>[Signature]</i> |                                                                                                                                                                                                                                                                                | SHEET 2 OF 9 |
| APPROVED   | <i>[Signature]</i> | TITLE<br>205 SKIDTUBE ASSEMBLY                                                                                                                                                                                                                                                 | SCALE<br>NTS |
| DE APPR.   | <i>[Signature]</i> |                                                                                                                                                                                                                                                                                |              |
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**D2580-1 BENT TUBE**  
(MAKE FROM D2580-101 TUBE)

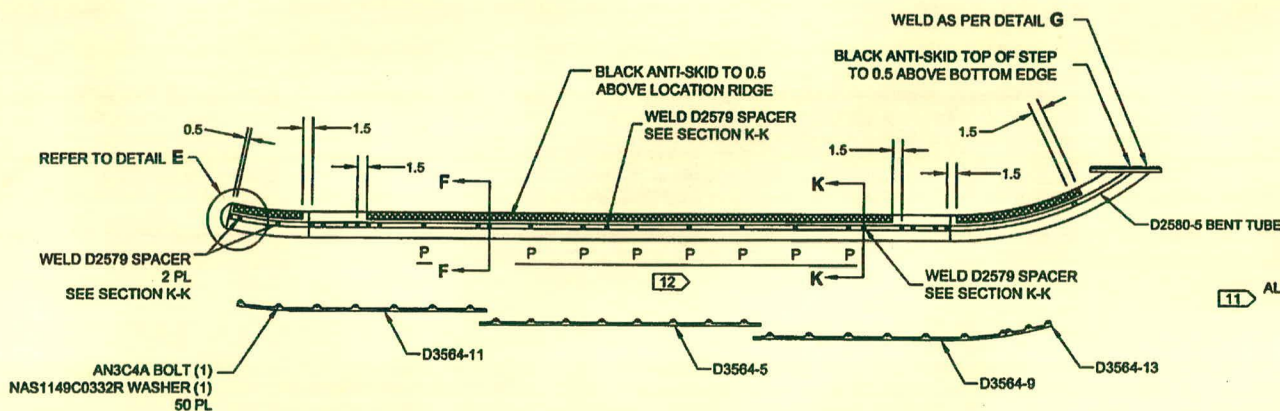
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|------------|--------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|
| DESIGN     | DS                 | <b>DART AEROSPACE LTD</b><br>HAWKESBURY, ONTARIO, CANADA                                                                                                                                                                                                                                 |                        |
| DRAWN      | SAD                |                                                                                                                                                                                                                                                                                          |                        |
| CHECKED    | <i>[Signature]</i> | DRAWING NO.<br>D2580                                                                                                                                                                                                                                                                     | REV. H<br>SHEET 3 OF 9 |
| MFG. APPR. | <i>[Signature]</i> | TITLE<br>205 SKIDTUBE ASSEMBLY                                                                                                                                                                                                                                                           | SCALE<br>NTS           |
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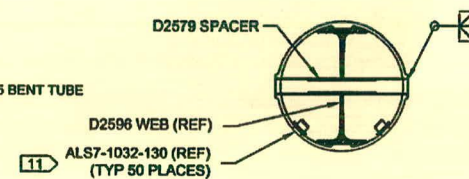






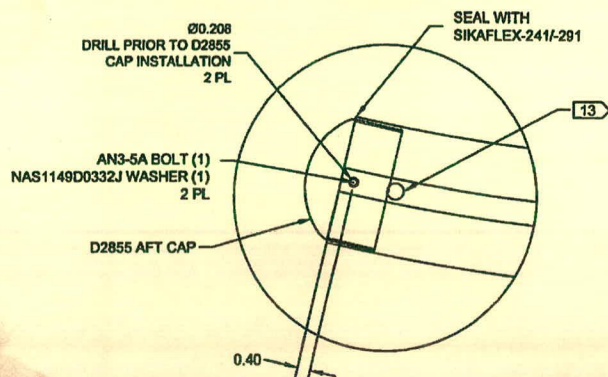
**D2580-045 ASSEMBLY DETAIL**

**SECTION K-K  
SCALE 5X**

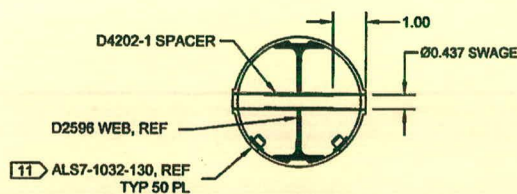


AFTER DRILLING AND BENDING ASSEMBLY  
PERFORM THE FOLLOWING FOR Ø0.508 HOLES ONLY:  
1. CHAMFER HOLE 0.050 X 45°  
2. INSERT D2579 SPACER (4 PLACES)  
3. WELD INTO PLACE AND GRIND FLUSH  
4. DO NOT C'BORE

**DETAIL E  
SCALE 5X**

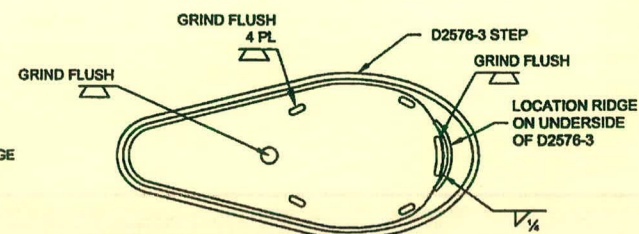


**SECTION F-F  
SCALE 5X**



AFTER DRILLING AND BENDING ASSEMBLY  
PERFORM THE FOLLOWING FOR Ø0.508 HOLES ONLY:  
1. INSERT D4202-1 SPACER (20 PLACES)  
2. SWAGE TO Ø0.437 X 1.00 DEEP PER QSI 002  
3. TRIM/GRIND FLUSH PER QSI 002

**DETAIL G  
SCALE 5X**

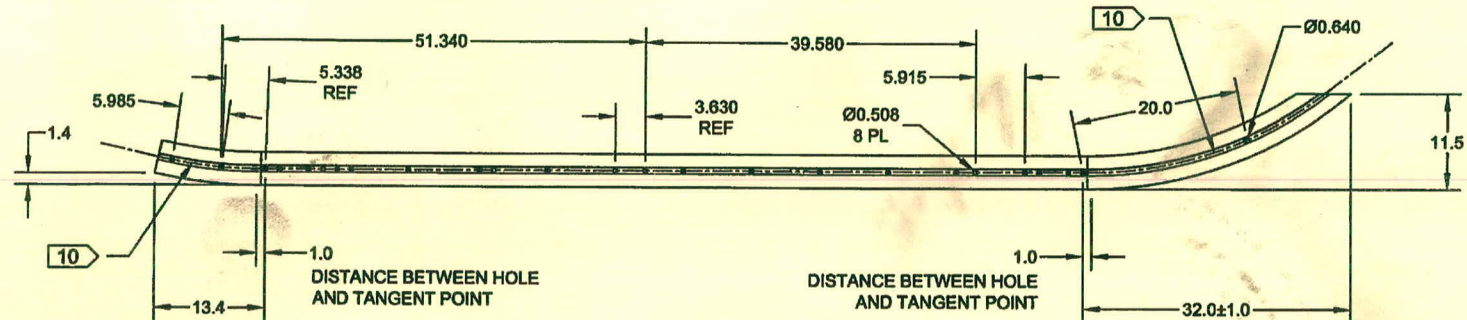


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2017 JUL 05

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| DESIGN     | DS                 | <b>DART AEROSPACE LTD</b>                                                                                                                                                                                                                                                                        |              |
| DRAWN      | SAD                | HAWKESBURY, ONTARIO, CANADA                                                                                                                                                                                                                                                                      |              |
| CHECKED    | <i>[Signature]</i> | DRAWING NO.                                                                                                                                                                                                                                                                                      | REV. H       |
| MFG. APPR. | <i>[Signature]</i> | D2580                                                                                                                                                                                                                                                                                            | SHEET 4 OF 9 |
| APPROVED   | <i>[Signature]</i> | TITLE                                                                                                                                                                                                                                                                                            | SCALE        |
| DE APPR.   | <i>[Signature]</i> | 205 SKIDTUBE ASSEMBLY                                                                                                                                                                                                                                                                            | NTS          |
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**D2580-5 BENT TUBE**  
(MAKE FROM D2580-101 TUBE)

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2017 JUL 05

|            |                    |                                                                                                                                                                                                                                                                                                  |              |
|------------|--------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|
| DESIGN     | DS                 | <b>DART AEROSPACE LTD</b>                                                                                                                                                                                                                                                                        |              |
| DRAWN      | SAD                | HAWKESBURY, ONTARIO, CANADA                                                                                                                                                                                                                                                                      |              |
| CHECKED    | <i>[Signature]</i> | DRAWING NO.                                                                                                                                                                                                                                                                                      | REV. H       |
| MFG. APPR. | <i>[Signature]</i> | D2580                                                                                                                                                                                                                                                                                            | SHEET 5 OF 9 |
| APPROVED   | <i>[Signature]</i> | TITLE                                                                                                                                                                                                                                                                                            | SCALE        |
| DE APPR.   | <i>[Signature]</i> | 205 SKIDTUBE ASSEMBLY                                                                                                                                                                                                                                                                            | NTS          |
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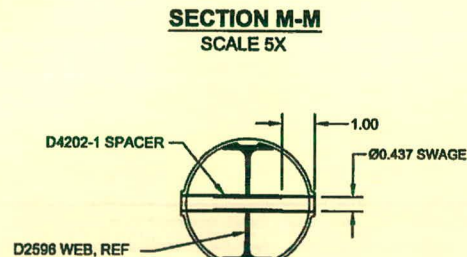
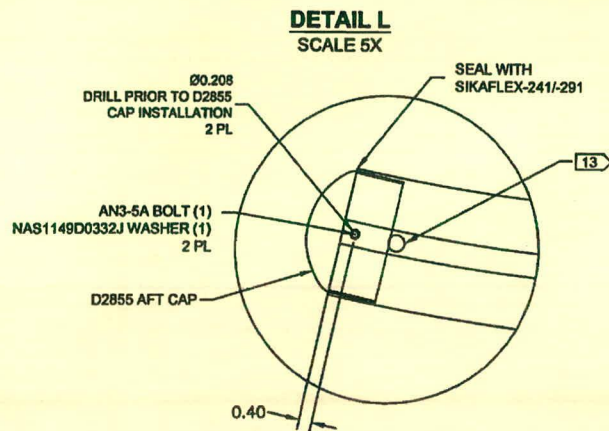
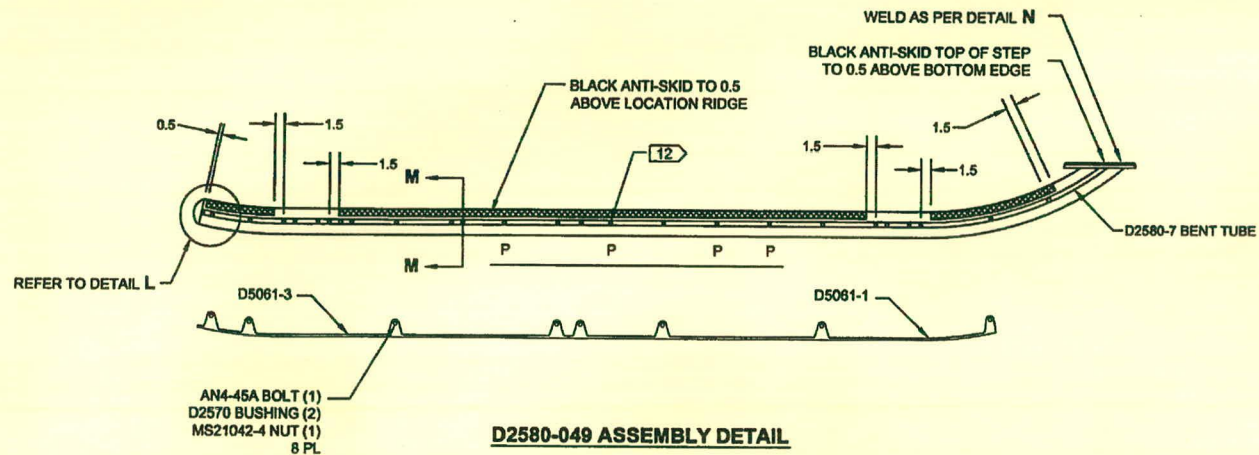






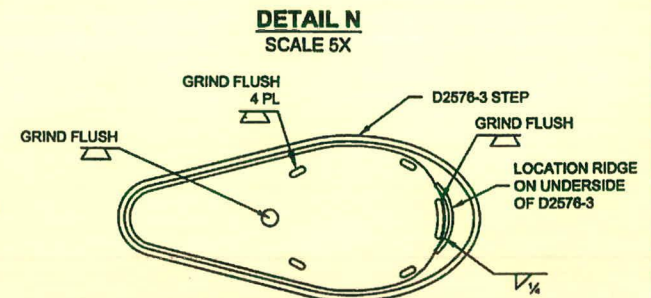






AFTER DRILLING AND BENDING ASSEMBLY  
PERFORM THE FOLLOWING FOR Ø0.508 HOLES ONLY:

1. INSERT D4202-1 SPACER (24 PLACES)
2. SWAGE TO Ø0.437 X 1.00 DEEP PER QSI 002
3. TRIM/GRIND FLUSH PER QSI 002



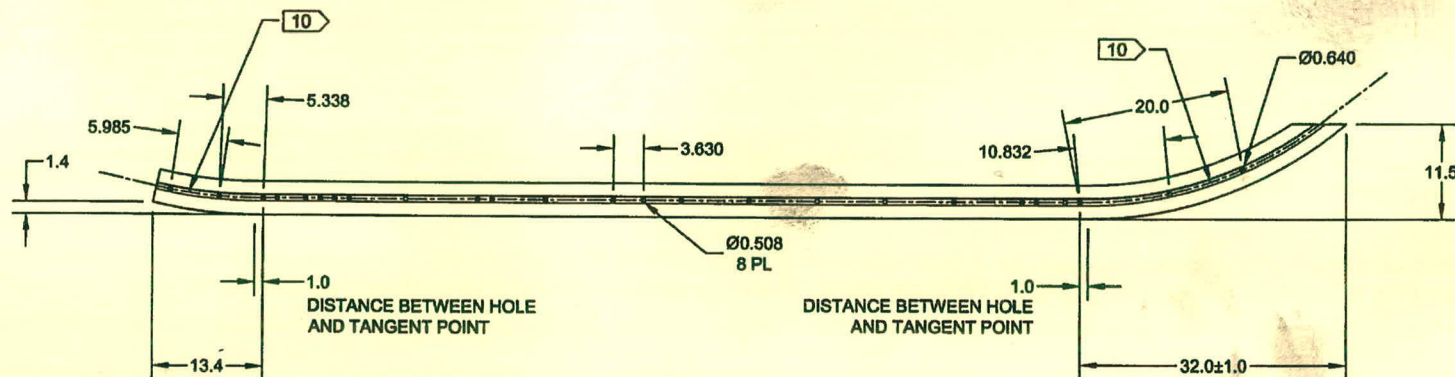
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2017 JUL 05

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|------------|--------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|
| DESIGN     | DS                 | <b>DART AEROSPACE LTD</b><br>HAWKESBURY, ONTARIO, CANADA                                                                                                                                                                                                                       |                        |
| DRAWN      | SAD                |                                                                                                                                                                                                                                                                                |                        |
| CHECKED    | <i>[Signature]</i> | DRAWING NO.<br>D2580                                                                                                                                                                                                                                                           | REV. H<br>SHEET 7 OF 9 |
| MFG. APPR. | <i>[Signature]</i> | TITLE<br>205 SKIDTUBE ASSEMBLY                                                                                                                                                                                                                                                 | SCALE<br>NTS           |
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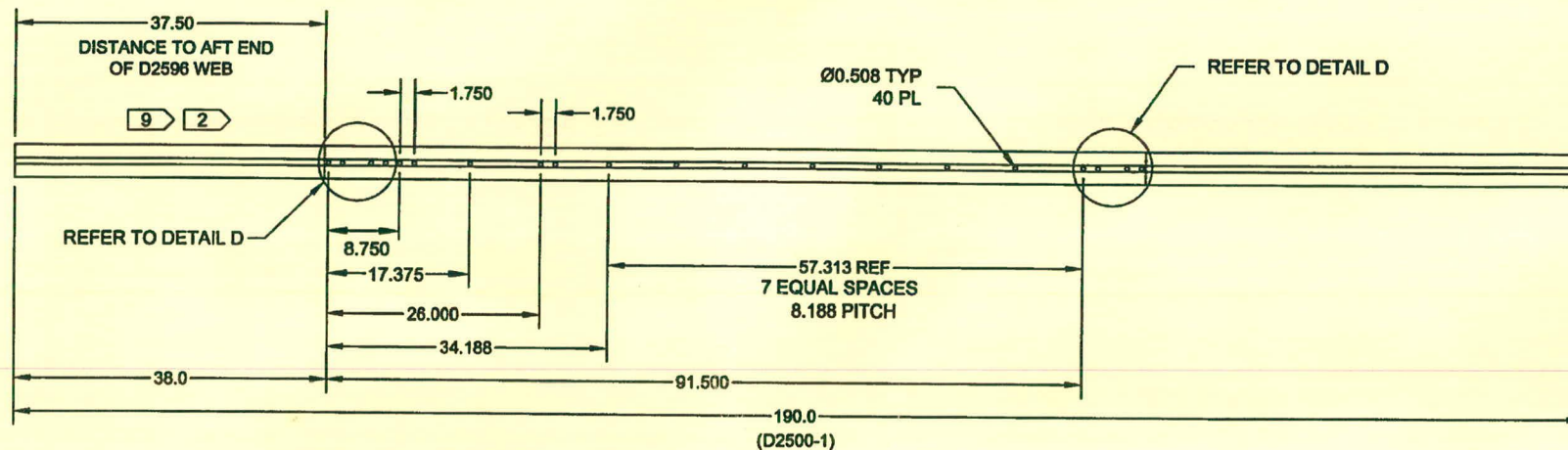
**D2580-7 BENT TUBE**  
(MAKE FROM D2580-101 TUBE)

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2017 JUL 05

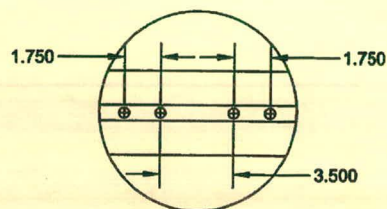
|            |                    |                                                                                                                                                                                                                                                                                |                        |
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| DESIGN     | DS                 | <b>DART AEROSPACE LTD</b><br>HAWKESBURY, ONTARIO, CANADA                                                                                                                                                                                                                       |                        |
| DRAWN      | SAD                |                                                                                                                                                                                                                                                                                |                        |
| CHECKED    | <i>[Signature]</i> | DRAWING NO.<br>D2580                                                                                                                                                                                                                                                           | REV. H<br>SHEET 8 OF 9 |
| MFG. APPR. | <i>[Signature]</i> | TITLE<br>205 SKIDTUBE ASSEMBLY                                                                                                                                                                                                                                                 | SCALE<br>NTS           |
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| DATE       | 17.06.09           |                                                                                                                                                                                                                                                                                |                        |







**D2580-101 TUBE**



**DETAIL D**  
SCALE 5X

**RELEASED**

2017 JUL 05

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|------------|--------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|
| DESIGN     | DS                 | <b>DART AEROSPACE LTD</b>                                                                                                                                                                                                                                                                 |              |
| DRAWN      | SAD                | HAWKESBURY, ONTARIO, CANADA                                                                                                                                                                                                                                                               |              |
| CHECKED    | <i>[Signature]</i> | DRAWING NO.                                                                                                                                                                                                                                                                               | REV. H       |
| MFG. APPR. | <i>[Signature]</i> | D2580                                                                                                                                                                                                                                                                                     | SHEET 9 OF 9 |
| APPROVED   | <i>[Signature]</i> | TITLE                                                                                                                                                                                                                                                                                     | SCALE        |
| DE APPR.   | <i>[Signature]</i> | 205 SKIDTUBE ASSEMBLY                                                                                                                                                                                                                                                                     | NTS          |
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